

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. Please cancel claims 32 and 47. Please amend claims 25, 30, and 44, as follows:

Listing of Claims:

1-24. (Cancelled)

25. (Currently amended) A method of evaluating an integrated circuit having a plurality of data terminals at which data signals are received, the method comprising:

capacitively coupling a test plate integrated in the integrated circuit to a plurality of data terminals at which data signals are received;

transmitting a data signal representing expected data from the test plate;

receiving the data signal by at least to-one of the plurality of data terminals;

generating an internal data signal representing received data responsive to the data signal received by the data terminal; and

comparing evaluating the received data represented by the internal data signal detected by at the data terminal against a test criteria to the expected data represented by the data signals.

26. (Original) The method of claim 25, further comprising placing the remaining data terminals of the plurality in a high-impedance state.

27. (Previously presented) The method of claim 25 wherein the receiving data terminal is a first data terminal, and the method further comprises:

ceasing reception of the data signal from the first data terminal;

transmitting a data signal from the test plate to another one of the plurality of data terminals; and

evaluating the data signal detected by other data signal-terminal against the test criteria.

28. (Previously presented) The method of claim 25 wherein the integrated circuit is formed on a semiconductor die and capacitively coupling a test plate comprises:

forming the test plate from a conductive plate layer formed on the semiconductor die; and

forming the plurality of data terminals from conductive signal pads and in proximity to the conductive plate layer, the conductive plate layer separated from the conductive signal pads by a dielectric material.

29. (Original) The method of claim 28 wherein capacitively coupling a test plate further comprises decoupling the test plate from a voltage reference and coupling the test plate to a transmitting circuit generating a test signal in response to detecting an input test signal.

30. (Currently amended) The method of claim 25 wherein comparing evaluating the received represented by the internal data signal to the expected data detected by the data terminal comprises:

generating a test signal to be applied to the test plate as the data signal;

coupling the internal data test signal detected at the data terminal to a test terminal of the integrated circuit; and

coupling test equipment to the test terminal to receive the internal data test signal.

31. (Original) The method of claim 25 wherein the integrated circuit comprises a memory device.

32-43. (Cancelled)

44. (Currently amended) A test apparatus for an integrated circuit having a plurality of capacitively coupled signal terminals to which a corresponding plurality of receivers are coupled, the receivers generating a respective received data signal in response to detecting a respective input data signal, the test apparatus comprising:

a test plate integrated in the integrated circuit configured to be capacitively coupledto the signal terminals of the integrated circuit;

a test transmitter circuit coupled to the test plate and configured to apply to transmit a test data signal to the test plate to be transmitted to at least one of the signal terminals through the test plate as an input data signal, the test data signal representing expected data; and

a test unit coupled to the integrated circuit and configured to compare received data represented by the received data signal to the expected data represented by the test data signal test signal terminals to evaluate the detected data signal against test criteria.

45. (Original) The test apparatus of claim 44 wherein the test transmitter comprises a buffer circuit.

46. (Original) The test apparatus of claim 44 wherein the test unit comprises test circuitry to determine the functionality of the receivers coupled to the signal terminals and the integrity of a capacitor through which the signal terminal is capacitively coupled.

47. (Cancelled)